

Clean Copy of the Claims As Amended in the Amendment Dated August 24, 2001

*Claim 23* Claim 23. A process for preparing a gasoline-oxygenate blend comprising combining a neat blend of hydrocarbons with an alcohol, wherein the resulting gasoline-oxygenate blend has the following properties:

*C3*

- (a) a Dry Vapor Pressure Equivalent less than about 7.1 PSI; and
- (b) an alcohol content greater than about 5.8 volume percent.

Claim 24. The process of Claim 23 wherein the alcohol is ethanol.

*Claim 26* Claim 26. A process for preparing a gasoline/oxygenate blend comprising combining a neat blend of hydrocarbons with an alcohol, wherein the resulting gasoline-oxygenate blend has the following properties:

*C4*

- (a) a Dry Vapor Pressure Equivalent less than about 7.0 PSI; and
- (b) an alcohol content greater than about 5.0 volume percent.

Claim 27. The process of Claim 26 wherein the alcohol is ethanol.

event that a plurality of gasoline-oxygenate Phase I blend recipes were made for each neat blend A-X, the corresponding gasoline-oxygenate Phase I blend recipes in Table 8 have been designated by the blend letter designation, for example A, followed by a numerical designation, for example 1, such that the gasoline-oxygenate property shown in Tables 9-10 correspond to the blend letter, and number designation, if applicable. Accordingly, Table 8, entitled "Phase I Gasoline-Oxygenate Blend Recipes," shows each gasoline-oxygenate blend recipe in terms of volume percent of the total blend after the introduction of oxygenates.

TABLE 8: PHASE I GASOLINE-OXYGENATE BLEND RECIPES

BLEND	EtOH	C4	FFB	RAFF	HOR	TOL	LCC	ALKY	LSCC	HCC
	(in terms of volume percent of the total blend) (%)									
A1	9.50	0.00	1.27	0.00	20.72	17.92	8.05	42.54	0.00	0.00
A2	5.42	0.0	1.3	0.0	21.7	18.7	8.4	44.5	0.0	0.0
B1	9.50	0.00	0.00	15.39	16.20	9.41	0.00	23.89	10.59	15.02
B2	5.42	0.0	0.0	16.1	16.9	9.8	0.0	25.0	11.1	15.7
C1	9.50	1.45	0.00	0.00	14.93	27.60	13.39	33.12	0.00	0.00
C2	5.42	1.5	0.0	0.0	15.6	28.8	14.0	34.6	0.0	0.0
D1	9.50	0	0	15.7	24.8	0	12.8	15.7	18.6	2.9
D2	5.42	0.0	0.0	16.5	25.9	0.0	13.3	16.5	19.4	3.0
E1	9.50	0.00	0.00	22.63	25.25	0.00	0.00	15.84	16.83	9.86
E2	5.42	0.0	0.0	23.6	26.4	0.0	0.0	16.6	17.6	10.3
F1	9.50	0.00	0.00	9.14	9.23	32.85	16.47	22.81	0.00	0.00
F2	5.42	0.0	0.0	9.6	9.6	34.3	17.2	23.8	0.0	0.0
G1	9.50	0.09	3.35	0.00	34.39	7.15	9.50	35.93	0.00	0.00
G2	5.42	0.1	3.5	0.0	35.9	7.5	9.9	37.5	0.0	0.0
H	9.50	0.00	0.00	12.49	15.48	0.00	0.09	25.61	18.55	18.19
I1	9.50	0.00	1.81	19.10	8.78	19.28	11.31	9.68	20.54	0.00
I2	5.42	0.0	1.9	20.0	9.2	20.1	11.8	10.1	21.5	0.0
J1	9.50	0.00	1.45	0.00	31.77	9.59	12.94	32.67	0.00	2.08
J2	5.42	0.0	1.5	0.0	33.2	10.0	13.5	34.1	0.0	2.2
K1	9.50	0.00	0.00	20.27	17.47	13.39	7.24	20.72	10.05	1.36
K2	5.42	0.0	0.0	21.2	18.3	14.0	7.6	21.7	10.5	1.4
L1	9.40	0.00	0.00	23.47	16.13	7.34	13.32	10.87	17.03	2.54
L2	5.42	0.0	0.0	24.5	16.8	7.7	13.9	11.3	17.8	2.6
M	9.50	0.00	0.00	11.67	19.10	0.18	9.96	20.27	17.20	12.13

C2

N	9.72	0.00	0.72	18.33	4.15	23.20	17.42	0.00	17.33	9.21
O1	9.79	0.00	2.71	0.00	20.57	15.97	9.11	36.26	0.00	5.68
O2	5.42	0.0	2.8	0.0	21.6	16.7	9.6	38.0	0.0	6.0
P	9.72	0.00	0.00	15.98	0.00	19.23	6.68	19.41	15.80	13.27
Q	9.64	0.00	0.00	17.80	4.70	14.64	3.34	12.83	18.61	18.52
Q2	5.42	0.0	0.0	18.6	4.9	15.3	3.5	13.4	19.5	19.4
R1	9.59	0.00	0.00	20.52	17.36	5.33	7.23	5.79	23.87	10.22
R2	5.42	0.0	0.0	21.5	18.2	5.6	7.6	6.1	25.0	10.7
S1	9.69	0.00	0.99	11.56	0.00	26.55	14.54	36.76	0.00	0.00
S2	5.42	0.0	1.0	12.1	0.0	27.8	15.2	38.5	0.0	0.0
T	9.66	0	0	13.5	15.3	4.2	15.4	12.3	26.6	3.3
U	9.66	0	0	4.2	12.8	15.7	7.5	32.2	0	17.9
V	9.81	0	0	19.1	13.3	0	0	17.2	26.8	13.7
W	9.67	0	0	0	32	11.8	26.7	19.7	0	0
X	9.65	0	0	9.7	0	0.4	0.73	34.5	24	21.1

Each of the gasoline-oxygenate blends was tested offline using the appropriate laboratory ASTM procedure found in the *Standard Test Method for Research Octane Number of Spark-Ignition Engine Fuel*, ASTM D 2699, the *Standard Test Method for Motor Octane Number of Spark-Ignition Engine Fuel*, ASTM D 2700, the *Standard Test Method for Vapor Pressure of Petroleum Products (Mini Method)*, ASTM D 5191, and the *Standard Test Method for Distillation of Petroleum Products at Atmospheric Pressure*, ASTM D 86.

As before, each blend designation shown below corresponds to the gasoline-oxygenate blend recipe shown in Table 8. For example, gasoline-oxygenate blend A1 in Table 9 corresponds to the blend recipe shown for gasoline-oxygenate blend designation A1 in Table 8. Similarly, gasoline-oxygenate blend A2 below corresponds to the gasoline-oxygenate blend designation A2 in Table 8. With these designations in mind, the following gasoline-oxygenate blend properties were determined.